B1 Cont.

gene. The open box represents the untranslated exon and the shadowed box represents the first coding exon. The size of the exon and the intron is indicated.--

Please replace the paragraph on page 12, lines 2-7, with the following rewritten paragraph:

B2

--Sequence of the genomic DNA of the murine villin gene (SEQ ID NO:1) comprising cis-acting elements capable to promote the transcription of the murine villin gene in intestinal mucosa and kidney proximal tubules. The sequence comprises the transcription initiation site at position 3442 followed by the sequence of exon 1 containing 46 pb, the translation initiation codon at position 8993, the sequence of intron 1 extending from nucleotide 3488 to nucleotide 8981.--

Please replace the paragraph on page 13, line 26 through page 14, line 13, with the following rewritten paragraph:

B3

--Total RNA was isolated from mouse intestine with RNA NOW reagent (Biogentex) under the conditions suggested by the supplier. For primer extension assay, 2 ng of ^{32}P-labeled oligonucleotide probe (5'-GAGTGGTGATGTTGAGAGAGCCT-3'; SEQ ID NO:2) complementary to nucleotides +81 to +103 of the murine villin cDNA (GenBank Accession No. M98454) was hybridized with 30 µg of total RNA at 60°C (0.25 M KCl, 10 mM Tris-HCl, pH 7.5, 1 mM EDTA) for 90 min. Transcription with 5 U/µl of Moloney murine leukemia virus reverse transcriptase (Life Technologies, Inc.) was carried out at 37°C for 90 min in a 300 µl of a solution containing 75 mM KCl, 3 mM $MgCl_2$, 50 mM Tris-HCl (pH 8.3), 10 mM dithiothreitol, 0.75 mM deoxynucleoside triphosophates, 75 µg/ml actinomycin D and 0.3 U/µl RNasin. The primer extension products were separated by electrophoresis in denaturing 8% polyacrylamide gels. The full-length extension product (105 nucleotides) was obtained by comparison with the length of the comigrating sequencing reaction products. A primer extension control experiment was performed on the same total RNA preparation, using a ^{32}P-labeled oligonucleotide probe (5'-CATAGTTCTCGTTCCGGT-3'; SEQ ID NO:3) complementary to nucleotides +63 to +80 of the mouse intestinal fatty acid binding protein (I-FABP) cDNA and generating a 81-nucleotide extension product (27).--

Please replace the paragraph on page 15, line 3 through page 16, line 2, with the following rewritten paragraph:

B4

--All constructs described were subcloned into the pBluescript II KS vector (Stratagene) with

fragments isolated from a λDASHII phage containing a 16.3 kb region (9 kb upstream and 7.3 kb downstream from the translation initiation codon) of the mouse villin gene (29). The pD1 construct (as described in the Fig. 3B) was prepared by ligating *a Bam*HI fragment of 5.1 kb (1.8 kb upstream from the ATG translation initiation codon of the mouse villin gene, subcloned 5' to the nuclear localization signal-β-galactosidase gene-SV40 polyadenylation site, using a polymerase chain reaction (PCR) strategy) at the *Bam*HI site in a plasmid containing the 3.7 kb region of the mouse villin gene (immediately 5' to the 1.8 kb region described above). The pA1 and pA2 (containing an internal 1 kb deletion) constructs have resulted from several steps based on the *Bst*EII sites present in the 3.7 kb region described above and in a plasmid containing the 3.5 kb region of the mouse villin gene (immediately 5' to the 3.7 kb region). The pC1 and pC2 constructs were derived from the pAl and pA2 plasmids cut with *Apa*I and re-ligated, respectively. To generate the pB1 construct, a *Bgl*II fragment (480 bp) from the 3.5 kb region described above was excised and cloned into the *Kpn*I site of the pC1 plasmid. The pA3, pB3 and pC3 constructs correspond to the pA1, pB1 and pC1 deleted from the intron 1 (Fig. 3B). The sequence between the transcription initiation start site and the translation initiation codon, excluding the intron 1, was deduced from that of the murine villin cDNA (GenBank Accession No. M98454) and was introduced into the *Bgl*II-*Nco*I sites of the pC1 construct by using a dimerized oligodimer made of a coding-strand oligonucleotide (5'-GATCTCCCAGGTGG TGGCTGCCTCTTCCAGACAGGCT CGTCCAC-3'; SEQ ID NO:4) and a non coding-strand oligonucleotide (5'-CATGGTGGACGAGCCT GTCTGGAAGAGGCAGCCACCACCTGGGA-3'; SEQ ID NO:5), resulting in the pB3 construct. The pA3 and tbe pC3 constructs were derived from the pB3 plasmid by ligating an ApaI fragment (3.1 kb) and a *Bgl*II fragment (480 bp) from the 3.5 kb region described above, at the *Apa*I site in the pB3 plasmid respectively. Subcloning steps were confirmed by DNA sequencing.--

B4 CONT.

Please replace the paragraph on page 16, line 19 through page 17, line 8, with the following rewritten paragraph:

B5

--Total RNA was isolated from mouse tissues described above, with SV Total RNA Isolation System (Promega) under the conditions suggested by the supplier. 20 ng of pd$(N)_6$ random primer (Pharmacia) were hybridized with 2 μg of total RNA at 70°C for 10 min in distilled water. Reverse transcription with 200 U of Moloney murine leukemia virus reverse transcriptase

(SuperScript II, Life Technologies, Inc.) was carried out at 37°C for 90 min in a 20 µl solution of 1X First Strand Buffer (Life Technologies, Inc), 10 mM dithiothreitol, 0.5 mM deoxynucleoside triphosphates and 0.4 U/µl RNasin. 2 µl of the resulting cDNAs, were amplified by PCR reaction in 50 µl for 40 cycles. Each cycle consisted of 60 set at 94°C, 60 sec at 51°C (for transgene and villin) and 57°C (for TFIID), and 30 sec at 72°C. For the transgene primers, 5'-CAACTTCCTAAGATCTCC-3' (SEQ ID NO:6) coding strand and 5'-ATTCAGGCTGCGCAACTGTT-3' (SEQ ID NO:7) non-coding strand were used, generating a 250 bp product. For villin amplification 5'-CAACTTCCTAAGATCTCC-3' (SEQ ID NO:6) coding strand primer and 5'-GCAACAGTCGCTGGACATCACAGG-3' (SEQ ID NO:8) non-coding strand primers were used, generating a 473 bp product; for TFIID amplification 5'-CCACGGACAACTGCGTTGAT-3' (SEQ ID NO:9) coding strand primer and 5'-GGCTCATAGCTACTGAACTG-3' (SEQ ID NO:10) non-coding strand primer were used, generating a 220 bp product. In all cases, one-fifth of the PCR product was run on an ethidium bromide containing agarose gel.--

B5 CON-T.

Please insert the enclosed paper copy of the Sequence Listing into the application after the drawings.

In the Drawings

Please replace the drawings presently in the application with the 16 sheets of drawings enclosed herein.